

# ZEOsphere®

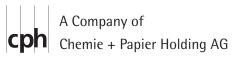
### SPHERICAL SHAPED SILICA GEL FOR HIGH END PURIFICATION

### Chromatographic Separations/Purification of

- Analytic- up to Process-Scale
- (Bio) Pharmaceuticals
- APIs and Intermediates

### Specialized in the Purification of

- Peptides
- Insulins (Analogues)
- Oligonucleotides
- Proteins



# Silica Separation. Pure. Efficient.

ZEOsphere<sup>®</sup> DRP. Mixed Mode Stationary Phase. One Phase. Multiple Interactions. Developed in collaboration with ETH Zurich.

Purification of charged API currently processed via reversed phase and/or ion-exchange chromatography. The unique method of ZEOsphere® DRP (Doped Reversed Phase) is based on attraction-repulsion by merging a high performance reversed-phase with ion-exchange (anion or cation) material.

ZEOsphere<sup>®</sup> DRP. Mixed mode. Spherical silica gel. Highly efficient and extremely powerful.

#### Peptides

Although reversed phase has proven to be an acceptable technique, its selectivity shortcomings and enormous costs have urged the need for more efficient separation techniques.

ZEOsphere<sup>®</sup> DRPs orthogonality leads to enhanced separation.

Sharper peaks, faster retention, better selectivity. Significant yield improvement. Lower organic solvent consumption.

#### Insulins

In crude insulins, differences in structures are very minimal. Presently used separation techniques like ionexchange and reversed phase lead to low production efficiency due to inadequate selectivity.

Dual interaction ZEOsphere<sup>®</sup> DRP. Substantially increased selectivity. Higher yield and loadability. Enhanced productivity.

#### Oligonucleotides

Synthetic oligonucleotides gain increasing importance in new therapeutic concepts.

Standard used reversed phase chromatography shows insufficient and strongly retained separation, which leads to low yields and a subsequent increase in costs.

ZEOsphere<sup>®</sup> DRP produces improved selectivity. Substantial higher yields. Unequalled efficiency.

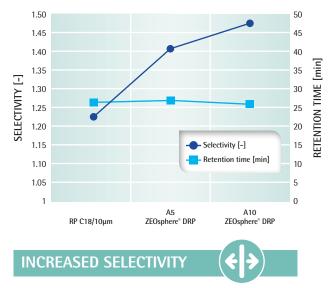
# At one glance – Your advantages

The outstanding benefits of ZEOsphere<sup>®</sup> DRP, in comparison to any traditional reversed phase, are tested and proven by independent institutes and companies. On request we offer in-house separation method development. ZEOsphere<sup>®</sup> Silica Gels are available in different quantities, in a variety of packaging sizes to meet any individual application and economic requirement.

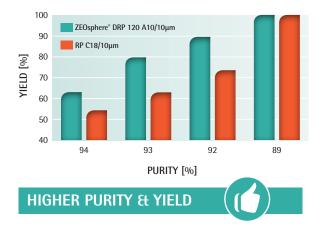
#### **GOSERELIN, POSITIVE CHARGED PEPTIDE**



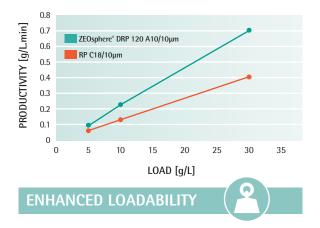
#### **GOSERELIN, POSITIVE CHARGED PEPTIDE**



## GOSERELIN, POSITIVITY CHARGED PEPTIDE YIELD VERSUS PURITY RATIO



#### GOSERELIN, POSITIVITY CHARGED PEPTIDE LOADING & PRODUCTIVITY



# About us

#### Mission

Zeochem AG, a manufacturer of molecular sieves, high quality irregular and spherical silica gels and deuterated compounds, was founded more than 200 years ago. Its headquarters is based in Switzerland. Zeochem is a subsidiary of the Swiss CPH Chemie + Papier Holding AG.

#### Quality

Our products are analyzed and certified by our state-of-the-art quality control lab. Zeochem AG uses its own test methods and applies proprietary test procedures specific to customer applications to ensure that our products enable the expected performance.

Zeochem AG is ISO 9001:2015 certified.

We are happy to meet your project requirements. Please contact Zeochem to outline your needs.

#### **Environment**

Zeochem AG regards the careful use of natural resources and safe production processes, as well as ensuring minimal pollution among its critical goals.

The company is a member of the Swiss Private Sector Energy Agency and is committed to the principles of «Responsible Care».

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